

AMENDMENTS TO THE CLAIMS

Please amend Claims 1, 2, 40, and 41, and add new Claims 51-58, as shown below. In the changes made to the claims by the current amendment, deletions are double bracketed (e.g., [[deletions]]) or shown by strikethrough (e.g., ~~deletions~~), and additions are underlined (e.g., additions). This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS

1. (Currently Amended) A stent for insertion into a bodily vessel for treatment of an aneurysm or ischemic diseases,

wherein the stent is made from a platinum:rhodium:ruthenium alloy comprising a composition of about 75-80% of platinum, 12-18% of rhodium and 5-10% of ruthenium;

wherein the stent comprises a generally tubular structure having an exterior surface defined by a plurality of interconnected struts having a plurality of interstitial spaces therebetween;

wherein the plurality of interstitial spaces have been cut from a sheet of metal forming the stent;

wherein the stent is sized to be positioned entirely within an intracranial vessel;
and

wherein the stent has a flexibility such that deflection of 1 mm from a neutral line occurs with less than 8 grams of force.

2. (Currently Amended) The stent according to claim 1, ~~wherein the stent comprises a generally tubular structure having an exterior surface defined by a plurality of interconnected~~

~~struts having interstitial spaces therebetween, wherein~~ said generally tubular structure is expandable from a first position to a second position, wherein said tubular structure expands radially outwardly to the second position such that the exterior surface of said structure engages with the inner surface of the bodily vessel so as to maintain a fluid pathway through said bodily vessel.

3. (Previously Presented) The stent according to claim 1, wherein the stent comprises a self-expandable stent.

4-8. (Canceled)

9. (Previously Presented) The stent according to claim 1, wherein the stent has a sidewall thickness of less than 0.0035".

10. (Previously Presented) The stent according to claim 1, wherein the surface of the stent is modified by passive coatings.

11. (Previously Presented) The stent according to claim 10, wherein the coating comprises iridium oxide or titanium nitrate.

12. (Original) The stent according to claim 10, wherein the stent is coated with an external layer containing a pharmaceutically effective amount of therapeutic substances.

13. (Original) The stent according to claim 1, further comprising markers to enhance visibility and radiopacity of the device.

14. (Original) The stent according to claim 13, wherein the markers include end markers or center markers.

15-16. (Canceled)

17. (Original) A delivery system for inserting a stent according to claim 1, within a bodily vessel, wherein the stent is expandable by balloon inflation, the delivery system

comprising a balloon delivery catheter and the stent, wherein the stent is mounted onto the balloon of the delivery catheter.

18. (Original) A delivery system for inserting a stent according to claim 1, within a bodily vessel, wherein the stent is self-expandable, the delivery system comprising a delivery catheter and the stent, wherein the stent is mounted onto a distal portion of the delivery catheter.

19-39. (Canceled)

40. (Currently Amended) A stent for insertion into a bodily vessel for treatment of an aneurysm or ischemic diseases,

wherein the stent is made from a platinum:rhodium alloy comprising a composition of about 65-75% of platinum and 25-35% of rhodium;

wherein the stent comprises a generally tubular structure having an exterior surface defined by a plurality of interconnected struts having a plurality of interstitial spaces therebetween;

wherein the plurality of interstitial spaces have been cut from a sheet of metal forming the stent;

wherein the stent is sized to be positioned entirely within an intracranial vessel;
and

wherein the stent has a flexibility such that deflection of 1 mm from a neutral line occurs with less than 8 grams of force.

41. (Currently Amended) The stent according to claim 40, ~~wherein the stent comprises a generally tubular structure having an exterior surface defined by a plurality of interconnected struts having interstitial spaces therebetween, wherein~~ said generally tubular structure ~~is~~ expandable from a first position to a second position, wherein said tubular structure

expands radially outwardly to the second position such that the exterior surface of said structure engages with the inner surface of the bodily vessel so as to maintain a fluid pathway through said bodily vessel.

42. (Previously Presented) The stent according to claim 40, wherein the stent comprises a self-expandable stent.

43. (Previously Presented) The stent according to claim 40, wherein the stent has a sidewall thickness of less than 0.0035".

44. (Previously Presented) The stent according to claim 40, wherein the surface of the stent is modified by passive coatings.

45. (Previously Presented) The stent according to claim 44, wherein the coating comprises iridium oxide or titanium nitrate.

46. (Previously Presented) The stent according to claim 44, wherein the stent is coated with an external layer containing a pharmaceutically effective amount of therapeutic substances.

47. (Previously Presented) The stent according to claim 40, further comprising markers to enhance visibility and radiopacity of the device.

48. (Previously Presented) The stent according to claim 47, wherein the markers include end markers or center markers.

49. (Previously Presented) A delivery system for inserting a stent according to claim 40, within a bodily vessel, wherein the stent is expandable by balloon inflation, the delivery system comprising a balloon delivery catheter and the stent, wherein the stent is mounted onto the balloon of the delivery catheter.

50. (Previously Presented) A delivery system for inserting a stent according to claim 40, within a bodily vessel, wherein the stent is self-expandable, the delivery system comprising a delivery catheter and the stent, wherein the stent is mounted onto a distal portion of the delivery catheter.

51. (New) A stent according to claim 1, wherein the stent comprises a material ratio in the range of about 12% to about 16%.

52. (New) A stent according to claim 1, wherein the stent has a profile of about 0.020 inches in compressed delivery mode.

53. (New) A stent according to claim 1, wherein the stent has a surface to length ratio of between about 1.1 mm²/mm to about 1.3 mm²/mm.

54. (New) A stent according to claim 1, wherein the stent has a thickness less than or equal to about 0.0028 inches.

55. (New) A stent according to claim 40, wherein the stent comprises a material ratio in the range of about 12% to about 16%.

56. (New) A stent according to claim 40, wherein the stent has a profile of about 0.020 inches in compressed delivery mode.

57. (New) A stent according to claim 40, wherein the stent has a surface to length ratio of between about 1.1 mm²/mm to about 1.3 mm²/mm.

58. (New) A stent according to claim 40, wherein the stent has a thickness less than or equal to about 0.0028 inches.